

SWBAT: compare electric and magnetic fields

Jan 4-7:20 AM

SECA Physics
Thursday 19 March 2015

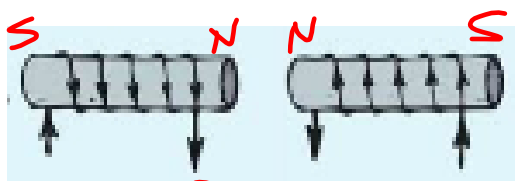
Welcome!!!

H. Leslie Grebe

RIGHT-HAND
RULE

* Pick up:

- slip of paper (for later)
- yellow and blue card



REPEL

Opening Questions:

Will these electromagnets attract or repel? Why do you say that?

Centering

Sep 7-7:04 AM



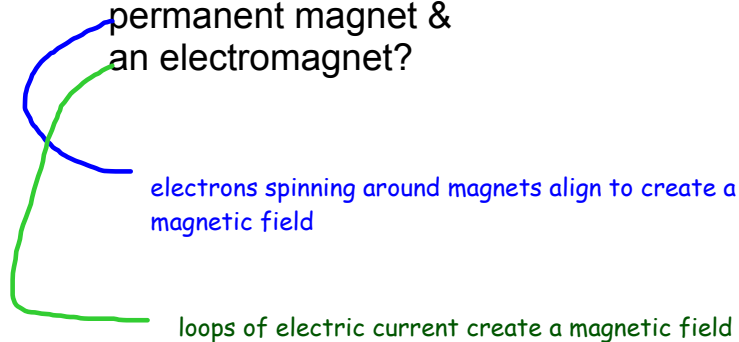
Mystery Resistor - extra credit

- You may work alone or with at most one other person of your choosing.
- Get a "Mystery Resistor" labeled with a letter from Leslie
- Use the same equipment that our teams used in class. Take measurements that will allow you to calculate the resistance (in Ohms) of your resistor.
- You may work when there is spare time in class or arrange other time with Leslie.

Due by 3:00 Friday 3/27

Jan 19-7:12 AM

So what's the difference between a permanent magnet & an electromagnet?



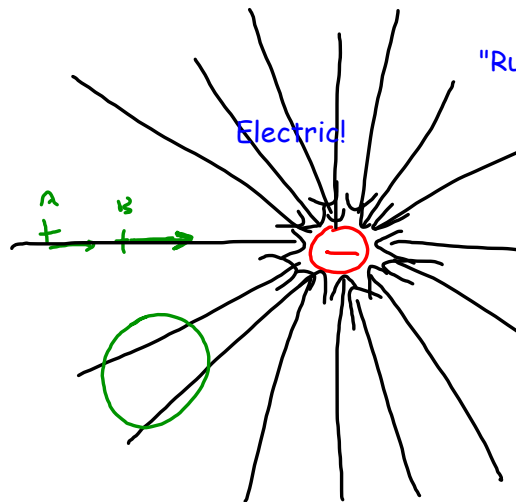
=> They work the same way!!!

Currents generate magnetic fields!

Mar 28-7:39 AM

Field Lines Review:

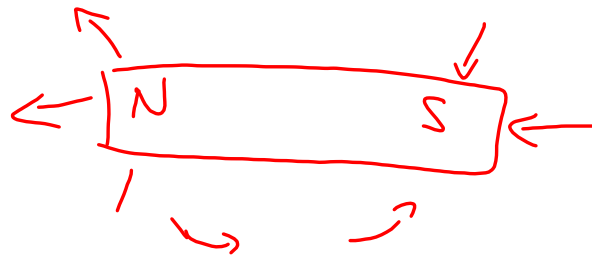
Phet reminder



"Rules" for E-field Lines:

- ① ALWAYS START AT POSITIVES & GO TO NEG.
- ② ARROWS GETTING CLOSER MEANS STRONGER FORCES

MAGNETIC FIELDS



Feb 2-8:20 AM

- BAGS OF IRON FILINGS OVER MAGNETS
- 3 OBSERVATIONS ABOUT MAGNETIC FIELDS
 - MOST ATTRACTED TO EDGES
 - DOESN'T CARE "N" OR "S"
 - SPIKY / FUZZY 3-DIMENSIONAL
 - CURVES FAR AWAY FROM MAGNET
 - CURVES

Mar 21-10:02 AM

Electric vs. Magnetic Fields: Battle Royale!!!!

Yellow card =
Electric field

Blue card =
Magnetic field

Both =
BOTH

1) Forces Attract and Repel

2

2

2✓

2) Positive and Negative

✓

X

3) Forces at a distance (without touching)

~

✓

4) North and South

✓

5) Current in a wire

5

✓

6) Electric charge

✓

Jan 7-7:38 AM

Outrageous Acts of Science

A show about viral videos and the science that makes them possible...

"Magnet express" Power Junkies #17

1. Just watch
2. Read the questions
3. Watch again
4. Discuss
5. Watch a last time to catch anything you might have missed



Oct 4-7:27 AM

Daily 3 Questions

CP Hmwk: Right-hand rule sheet

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your NAME!!!

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. Iron is most attracted to what part of the magnet?

EDGE, END

2. ~~The floating train worked because of~~

+ ~~£~~ -

- a. magnetic fields
- ☒ b. electric fields
- c. both

3. Forces acting at a distance is associated with

- a. magnetic fields
- b. electric fields
- ☒ c. both

Feb 18-6:59 AM